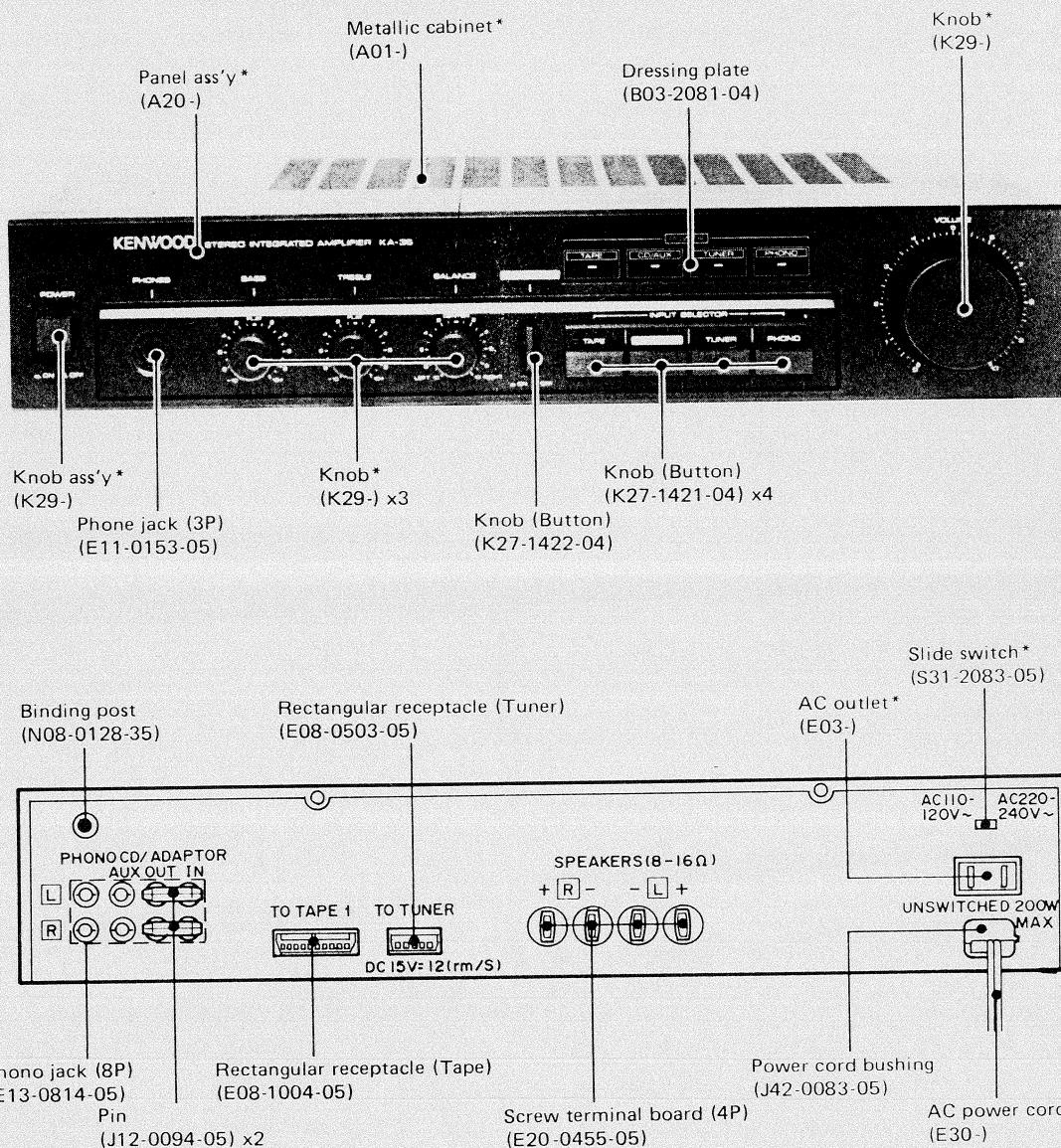


STEREO INTEGRATED AMPLIFIER  
**KA-35**  
 SERVICE MANUAL

**KENWOOD**

©1986-3/87-2 PRINTED IN JAPAN  
 B51-1927-00(O)100



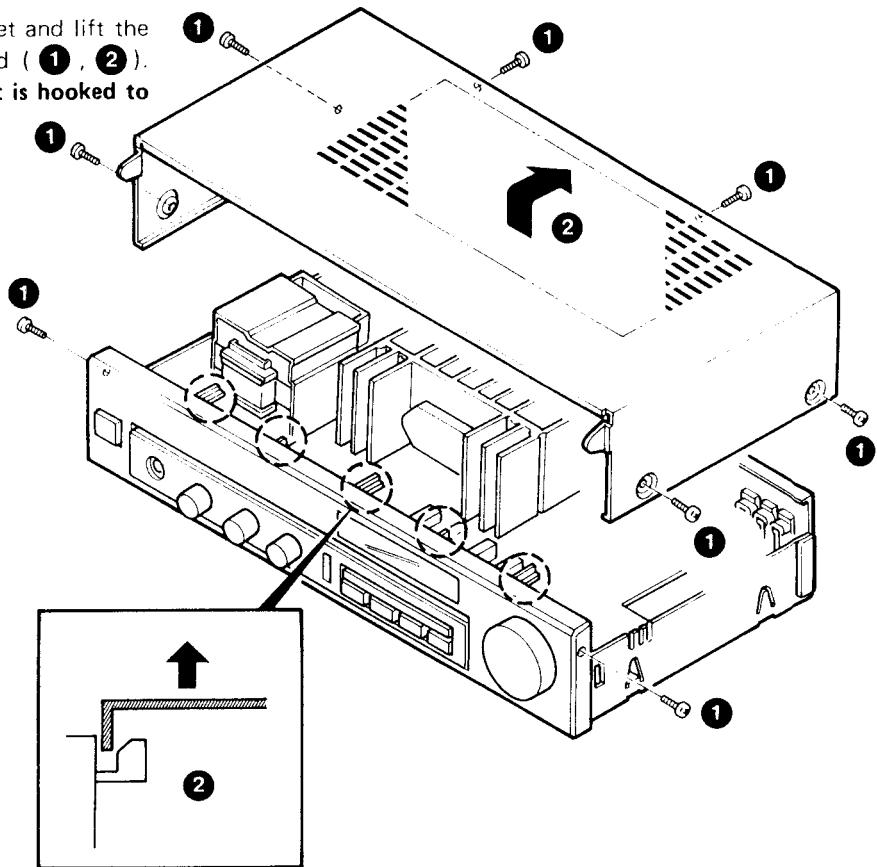
Note : When doing service of KT-35, KT-35L, or KX-35W be sure to have the customer bring the KA-35 or use the DC power supply.

\* Refer to parts list on page 6.

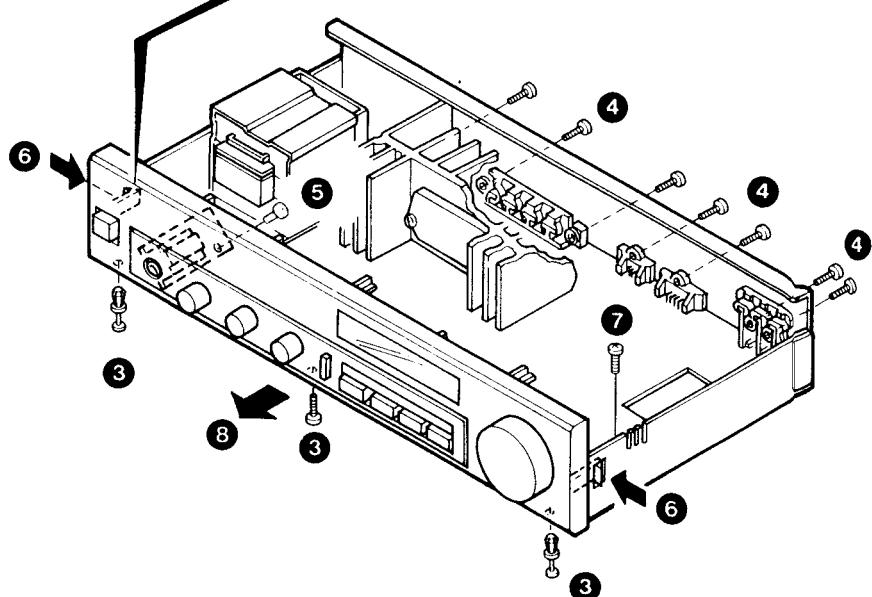
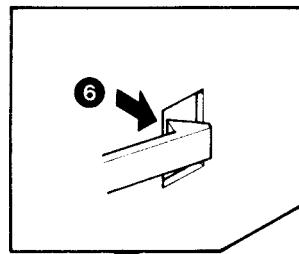
## DISASSEMBLY FOR REPAIR

## DISASSEMBLY FOR REPAIR

1. Remove 8 screws from the metallic cabinet and lift the metallic cabinet up and slide it rearward ( 1 , 2 ).  
**(Note)** Be aware that the metallic cabinet is hooked to the projections on the panel.

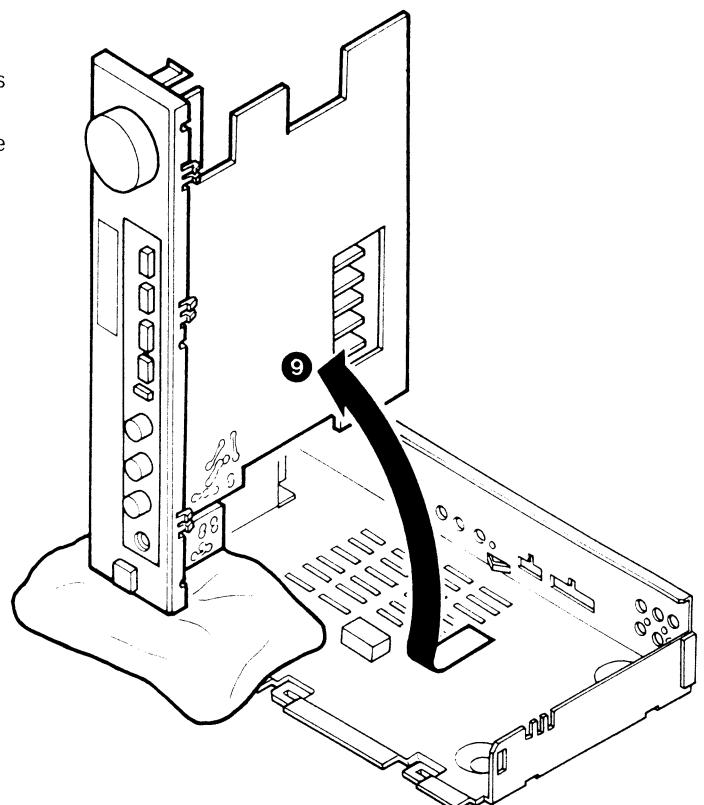


2. Remove 1 screw and two push rivets at the bottom of the panel ( 3 ) and 7 screws at the rear panel ( 4 ).
3. Remove 1 screw retaining the phone jack pcb ( 5 ).
4. Push the pawls at both sides of the panel and release from the hole ( 6 ).
5. Remove 1 screw at the pcb ( 7 ).
6. The panel with pc boards attached, can be pulled front-ward ( 8 ).



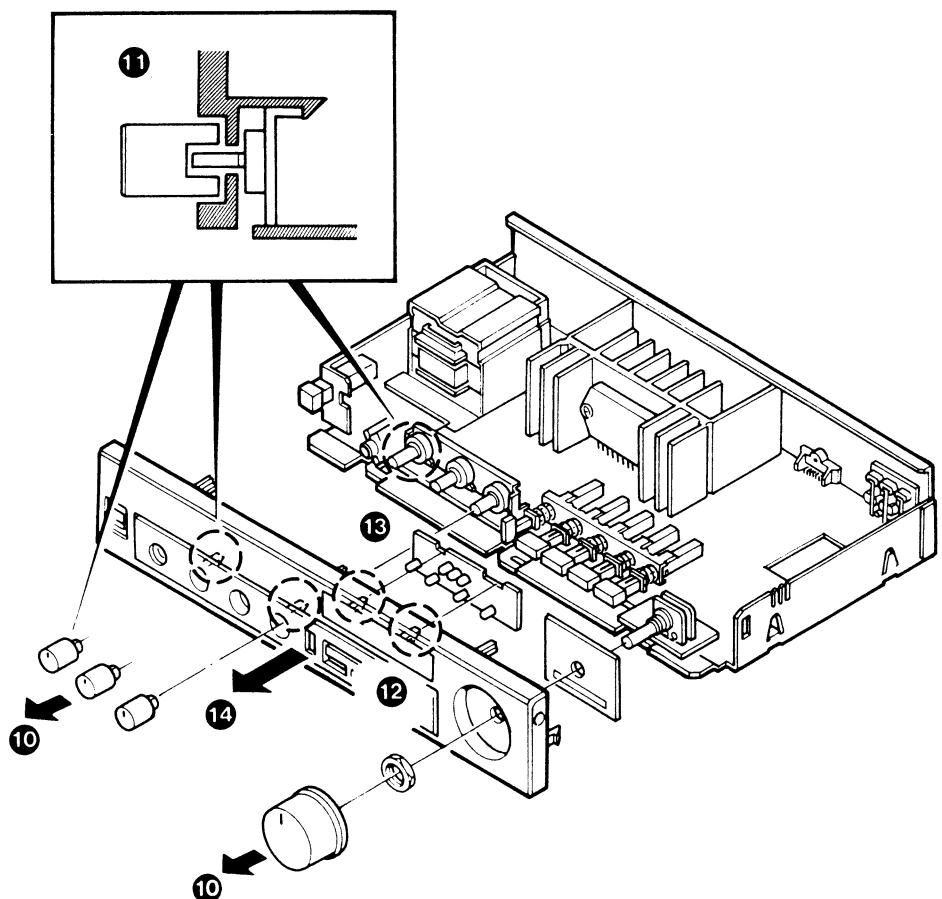
## DISASSEMBLY FOR REPAIR

6. Place a cloth, or something equivalent to avoid damages to the side of the panel.  
 7. Turn the panel to the upright position and place the pc board on the rear panel as shown ( 9 ).



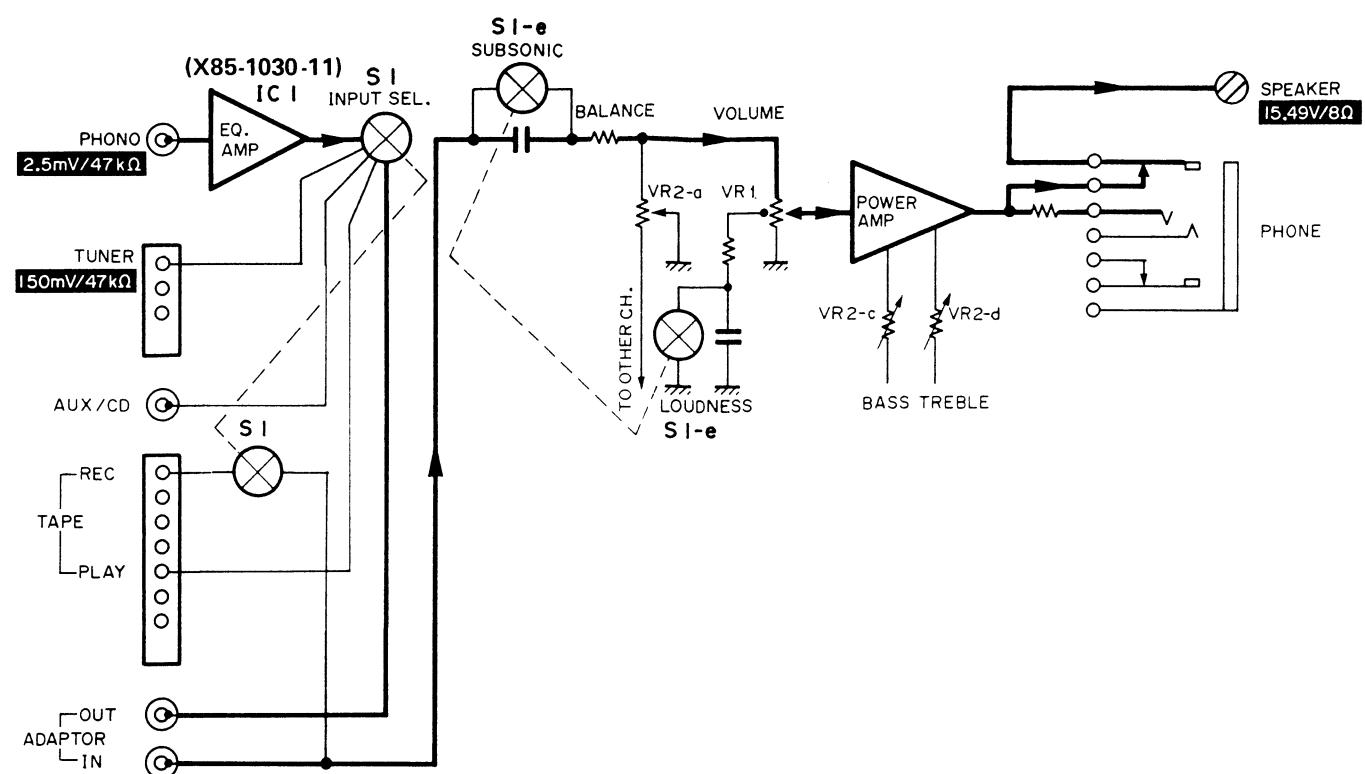
8. Pull off BASS, TREBLE, BALANCE and VOLUME knobs ( 10 ).  
 9. Release the hook on the rear side of the panel from the potentiometer mounting hardware ( 11 ).

10. Remove the hexagonal nut from the VOLUME potentiometer ( 12 ) and release the hook from the LED pc board ( 13 ).  
 11. Pull the panel frontward ( 14 ).



## BLOCK LEVEL DIAGRAM/CIRCUIT DESCRIPTION

## BLOCK LEVEL DIAGRAM



## CIRCUIT DESCRIPTION

## Description of components

## AUDIO (X09-2291-01)

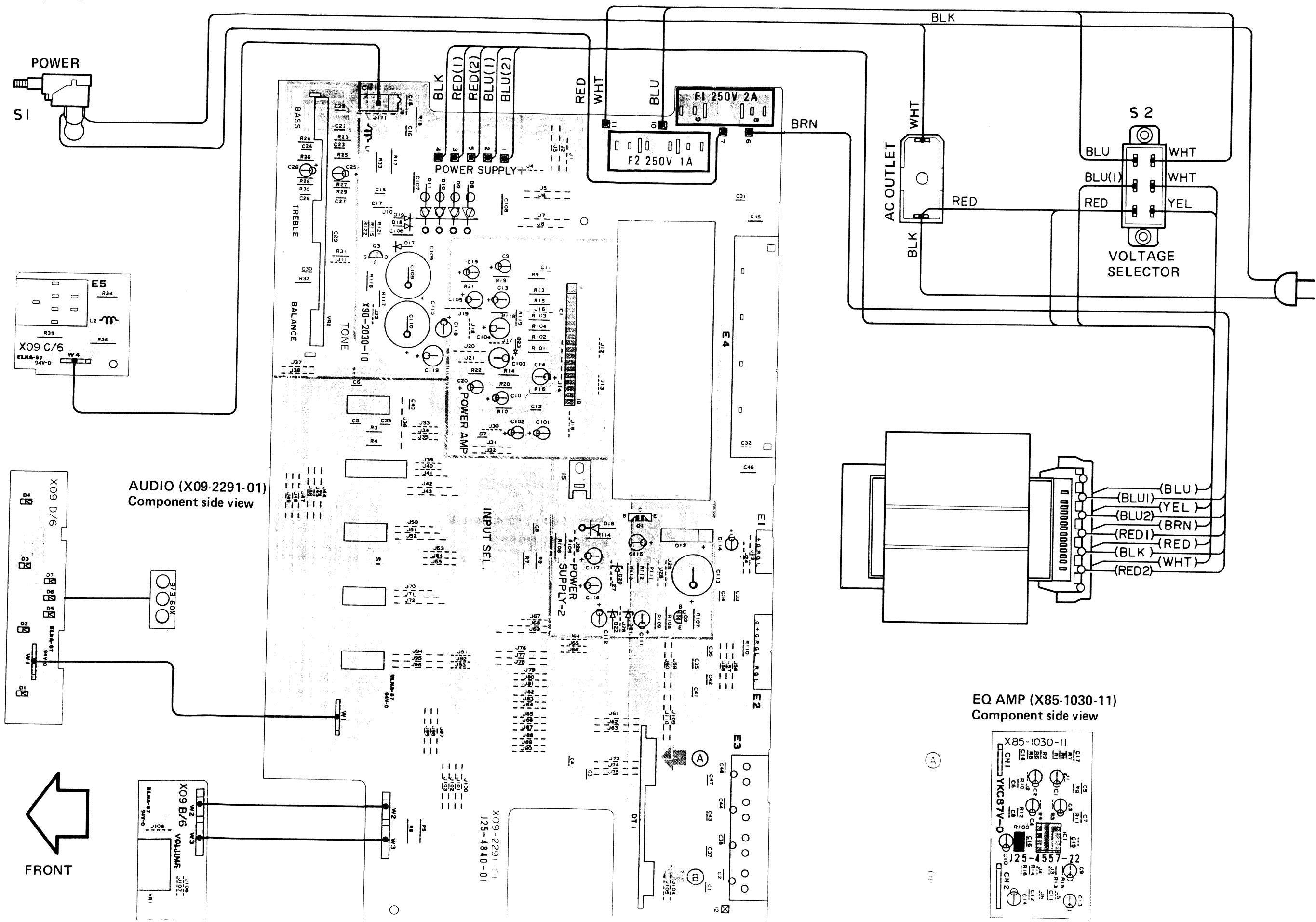
Component	Part No.	Application/function	Operation/condition/compatibility
IC1	STK4141/2*1 or STK4151/2	Power amplifier	
Q1	2SD1266(Q,P)	AVR	Compatible with 2SC2167 or 2SD330. (Required insulation plate and insulating bushing when attaching.)
Q2	2SC945(A),(Q,P)	Discharge EQ power supply when Power OFF	Compatible with 2SC2320(E,F).
Q3	2SK246(Y)	Muting when Power ON/OFF	
D1~D7	B30-0431-05	Various kinds display	
D8~D11	GP20DL	Rectifier	
D12	1B4B41	Rectifier for external power supply	
D16	GP10D-5007L	Rectifier for LEDs	Compatible with DSM1A1 or W06B.
D17~D19	SDM1A1	Muting control when Power ON/OFF	
D20	RD16ES(B2) or HZS16N(B2)	AVR for external power supply	Compatible with RD16E(B2), RD16J(B2), RD1 6JS(B2).
D21,D22	RD15ES(B) or HZS15N(B)	EQ AVR	Compatible with RD15E(B), RD15J(B), RD15JS(B).
D23	1SS131 or 1SS178	Muting control when power ON/OFF	Compatible with 1S2076A.

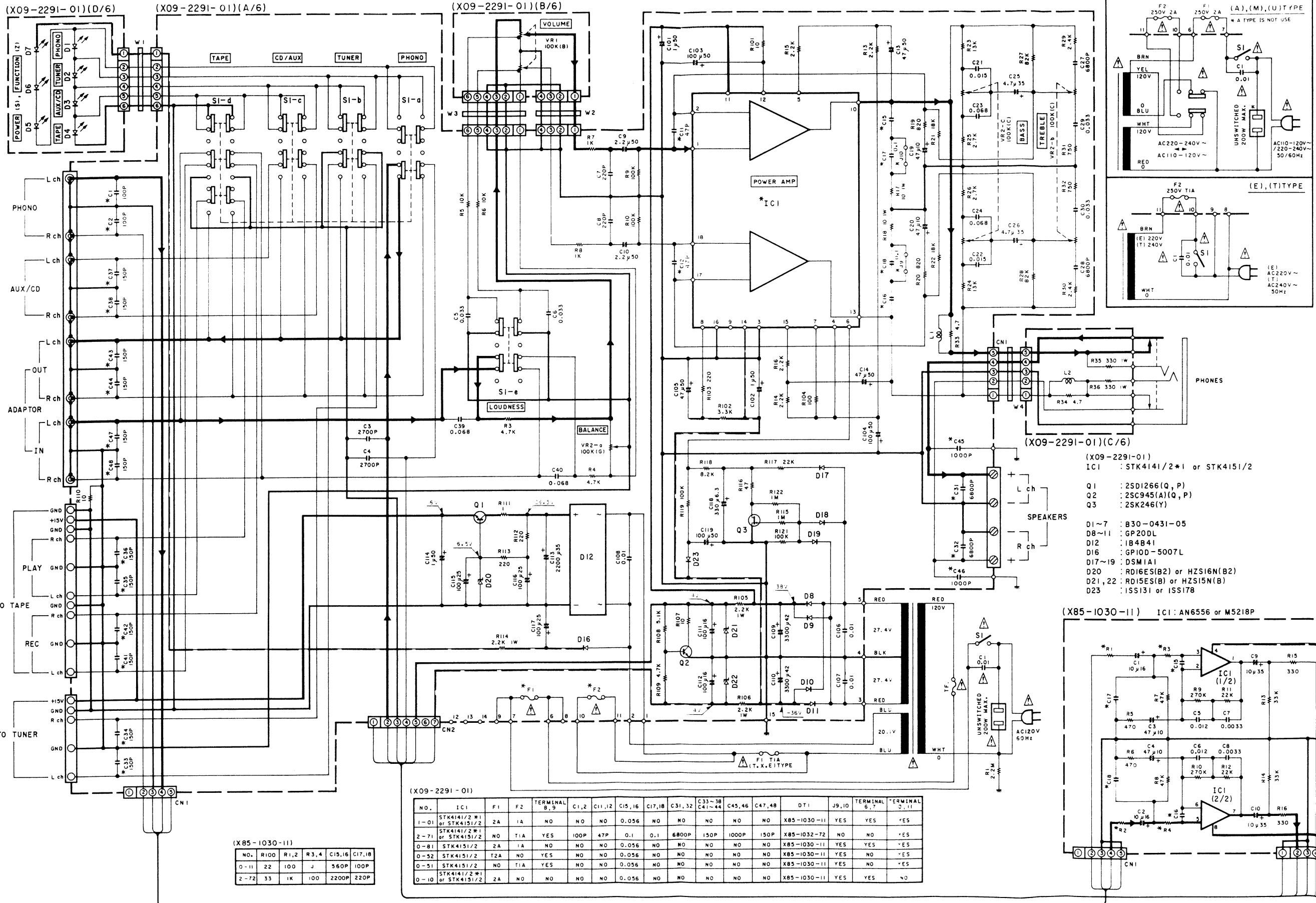
## EQ AMP (X85-1030-11)

Component	Part No.	Application/function	Operation/condition/compatibility
IC1	AN6556 or M5218P	EQ Amplifier	For Phono.

KA-35 KA-35

# PC BOARD



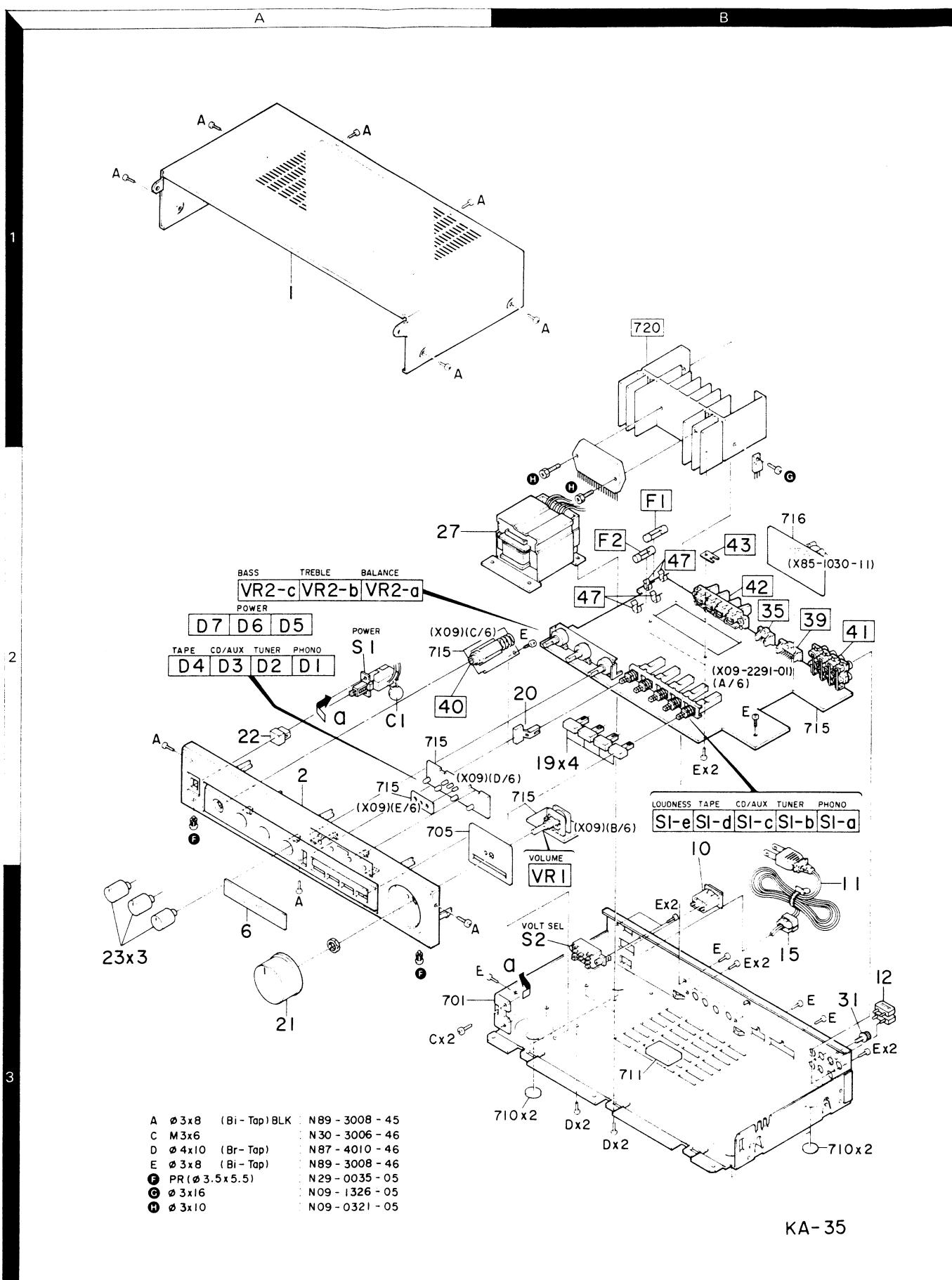


KA-35

KENWOOD

# KA-35 KA-35

## EXPLODED VIEW



## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 向 備考
		*	H01-7183-04	ITEM CARTON CASE	M2E2A2	
		*	H01-7184-04	ITEM CARTON CASE	T	
		*	H10-3315-02	POLYSTYRENE FOAMED FIXTURE		
		*	H10-3316-02	POLYSTYRENE FOAMED FIXTURE		
		*	H12-1136-04	CARTON BOARD		
			H25-0223-04	PROTECTION BAG (750X350)		
			H25-0232-04	PROTECTION BAG (235X350)		
12			J12-0094-05	PIN		
15			J42-0083-05	POWER CORD BUSHING		
			J13-0053-05	FUSE HOLDER		
			J61-0307-05	WIRE BAND	XE1E2	
19	2B		K27-1421-04	KNOP (BUTTON)	SELECTOR	
20	2B		K27-1422-04	KNOP (BUTTON)	LOUDNESS	
21	3A	*	K29-2399-04	KNOP	VOLUME	PUM1
21	3A	*	K29-2399-04	KNOP	VOLUME	UEX
21	3A	*	K29-2399-04	KNOP	VOLUME	TE1A1
21	3A	*	K29-2400-04	KNOP	VOLUME	M2E2A2
22	2A		K29-1446-04	KNOP ASSY	POWER	M2E2A2
22	2A		K29-2001-04	KNOP ASSY	POWER	PUM1
22	2A		K29-2001-04	KNOP ASSY	POWER	UEX
22	2A		K29-2001-04	KNOP ASSY	POWER	TE1A1
23	3A		K29-2026-04	KNOP	TONE, BALANCE	PUM1
23	3A		K29-2026-04	KNOP	TONE, BALANCE	UEX
23	3A		K29-2026-04	KNOP	TONE, BALANCE	TE1A1
23	3A		K29-2081-04	KNOP	TONE, BALANCE	M2E2A2
△27	2A		L01-6601-05	POWER TRANSFORMER	P	
△27	2A		L01-6605-05	POWER TRANSFORMER	UM1A1	
△27	2A		L01-6605-05	POWER TRANSFORMER	UEM2A2	
△27	2A		L01-6607-05	POWER TRANSFORMER	E1E2	
△27	2A		L01-6608-05	POWER TRANSFORMER	XT	
31	3B		N08-0128-35	BINDING POST (GND)		
F	2A, 3A		N29-0035-05	PUSH RIVET (3.5X5.5)	XTE1	
F	2A, 3A		N29-0035-05	PUSH RIVET (3.5X5.5)	E2	
F	2A, 3A		N29-0088-05	PUSH RIVET (3X6.3)		
R1			R92-0173-05	RC 2.2M M 1/2W	P	
△S1	2A		S40-1066-05	PUSH SWITCH (POWER)		
△S2	3B		S31-2083-05	SLIDE SWITCH (VOLTAGE SELECT)	UM1A1	
△S2	3B		S31-2083-05	SLIDE SWITCH (VOLTAGE SELECT)	UEM2A2	

## AUDIO (X09-2291-01)

D1	-7	2A	B30-0431-05	LED(LN210PH)		
C1	-2		CC45FSL1H101J	CERAMIC	100PF J	E1E2
C3	-4		CC45FSL1H272J	MF	2700PF J	
C5	-6		CF92FV1H333J	MF	0.033UF J	
C7	-8		CC45FSL1H221J	CERAMIC	220PF J	
C9	-10		CE04KW1H2R2M	ELECTR0	2.2UF 50WV	
C11	-12		CC45FSL1H470J	CERAMIC	47PF J	E1E2
C13	-14		CE04KW1H470M	ELECTR0	47UF 50WV	
C15	-18		CF92FV1H104J	MF	0.10UF J	E1E2
C15	-16		CF92FV1H563J	MF	0.056UF J	PUM1
C15	-16		CF92FV1H563J	MF	0.056UF J	UEX
C15	-16		CF92FV1H563J	MF	0.056UF J	TM2
C19	-20		CE04KW1A470M	ELECTR0	47UF 10WV	

M2,E2A2 Silver Panel

## PARTS LIST

\* New Parts

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Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 向 備考
C21	-22		CF92FV1H153J	MF	0.015UF J	
C23	-24		CF92FV1H683J	MF	0.068UF J	
C25	-26		CEO4KW1V4R7M	ELECTR0	4.7UF 35WV	
C27	-28		CF92FV1H682J	MF	6800PF J	
C29	-30		CF92FV1H333J	MF	0.033UF J	
C31	-32		CK45FB1H682K	CERAMIC	6800PF K	E1E2
C33	-38		CC45FSL1H151J	CERAMIC	150PF J	E1E2
C39	-40		CF92FV1H683J	MF	0.068UF J	
C41	-44		CC45FSL1H151J	CERAMIC	150PF J	E1E2
C45	-46		CK45B1H102K	CERAMIC	1000PF K	E1E2
C47	-48		CC45FSL1H151J	CERAMIC	150PF J	E1E2
C101	-102		CEO4KW1H101M	ELECTR0	1.0UF 50WV	
C103	-104		CEO4KW1H101M	ELECTR0	100UF 50WV	
C105			CEO4KW1H470M	ELECTR0	4.7UF 50WV	
C106	-108		CK45FE2H103P	CERAMIC	0.010UF P	
C109	-110		C90-1232-05	ELECTR0	3300UF 42WV	
C111	-112		CEO4KW1C101M	ELECTR0	100UF 16WV	
C113			CEO4KW1V222M	ELECTR0	2200UF 35WV	
C114			CEO4KW1H101M	ELECTR0	1.0UF 50WV	
C115	-117		CEO4KW1E101M	ELECTR0	100UF 25WV	
C118			CEO4KW0J331M	ELECTR0	330UF 6.3WV	
C119			CEO4KW1H101M	ELECTR0	100UF 50WV	
35	2B		E08-0503-05		RECTANGULAR RECEPTACLE (TUNER)	
39	2B		E08-1004-05		RECTANGULAR RECEPTACLE (TAPE)	
40	2A		E11-0153-05		PHONE JACK (3P) PHONES	
41	2B		E13-0814-05		PHONE JACK (8P) PHONES, TAPE	
42	2B		E20-0455-05		SCREW TERMINAL BOARD (4P)	
43	2B		E23-0125-05		TERMINAL (GND)	
△F1	2B		F05-2023-05		FUSE (250V 2A)	UM1A1
△F1	2B		F05-2023-05		FUSE (250V 2A)	UEM2A2
△F1	2B		F06-2027-05		FUSE (UL) (250V 2A)	
△F2	2B		F05-1023-05		FUSE (250V 1A)	UM1A1
△F2	2B		F05-1023-05		FUSE (250V 1A)	UEM2A2
△F2	2B		F05-1024-05		FUSE (UL) (250V 1A)	
△F2	2B		F06-1022-05		FUSE (SEMKO) (250V T1A)	XTE1
△F2	2B		F06-1022-05		FUSE (SEMKO) (250V T1A)	E2
47	2B		J13-0041-05		J13-0041-05	
47	2B		J13-0041-05		J13-0041-05	
47	2B		J13-0054-05		J13-0054-05	
47	2B		J13-0054-05		J13-0054-05	
L1	-2		L39-0085-05		PHASE-COMPENSATION COIL	
G			N09-1236-05		TAPPING SCREW (3X16)	
H			N09-0321-05		TAPPING SCREW (3X10)	
R13	-16		RD14AB2E222J	FL-PR00F RD	2.2K J 1/4W	
R17	-18		RS14DB3A100J	FL-PR00F RS	10 J 1W	
R33	-34		RD14AB2E4R7J	FL-PR00F RD	4.7 J 1/4W	
R35	-36		RS14DB3A331J	FL-PR00F RS	330 J 1W	
R101			RD14AB2E100J	FL-PR00F RD	10 J 1/4W	
R102			RD14AB2E332J	FL-PR00F RD	3.3K J 1/4W	
R103			RD14AB2E221J	FL-PR00F RD	220 J 1/4W	
R104			RD14AB2E101J	FL-PR00F RD	100 J 1/4W	
R105, 106	</					

## PARTS LIST

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Ref. No.	Address	New Parts	Parts No.	Description			Desti- nation	Re- marks
参照番号	位 置	新	部品番号	部品名 / 規格			仕 向	備考
R107			RD14AB2E100J	FL-PR00F RD 10	J	1/4W		
R111			RD14AB2E1R0J	FL-PR00F RD 1.0	J	1/4W		
R112,113			RD14AB2E221J	FL-PR00F RD 220	J	1/4W		
R114			RS14DB3A222J	FL-PR00F RS 2.2K	J	1W		
R116			RD14AB2E470J	FL-PR00F RD 47	J	1/4W		
VR1	3B		RD6-5067-05	POTENTIOMETER (100KX2) VOLUME				
VR2	2A		R29-9011-05	POTENTIOMETER (TONE,BALANCE)				
S1	2B	*	S42-5046-05	MULTIPLE PUSH SWITCH (SELECT)				
D8 -11			GP20DL	DIODE				
D12			1B4B41	DIODE				
D16			GP10D-5007L	DIODE				
D17 -19			DSM1A1	DIODE				
D20			HZ916N(B2)	ZENER DIODE				
D20		*	RD16ES(B2)	ZENER DIODE				
D21 ,22		*	HZ915N(B)	ZENER DIODE				
D21 ,22		*	RD15ES(B)	ZENER DIODE				
D23			1SS131	DIODE				
D23			1SS178	DIODE				
IC1			STK4141/2*1	IC(AF POWER AMP/ 25W X2)			PE1E2	
IC1			STK4151/2	IC(AF POWER AMP/ 30W X2)				
Q1			2SD1266(Q,P)	TRANSISTOR				
Q2			2SC945(A)(Q,P)	TRANSISTOR				
Q3			2SK246(Y)	FET				

## EQ AMP (X85-1030-11)

C1 ,2		CE04FW1C100M	ELECTRO	10UF	16WV			
C3 ,4		CE04FW1A470M	ELECTRO	47UF	10WV			
C5		CF92FV1H123J	MF	0.012UF	J			
C6		CF92FV1H123J	MF	0.012UF	J			
C7		CF92FV1H332J	MF	3300PF	J			
C8		CF92FV1H332J	MF	3300PF	J			
C9 ,10		CE04KW1V100M	ELECTRO	10UF	35WV			
C11 ,12		CK45FF1H103Z	CERAMIC	0.010UF	Z			
C15 ,16		CK45FB1H222K	CERAMIC	2200PF	K		E1E2	
C15 ,16		CK45FB1H561K	CERAMIC	560PF	K		PUM1A1	
C15 ,16		CK45FB1H561K	CERAMIC	560PF	K			
C17 ,18		CC45FSL1H101J	CERAMIC	100PF	J			
C17 ,18		CC45FSL1H101J	CERAMIC	100PF	J			
C17 ,18		CC45FSL1H101J	CERAMIC	100PF	J			
C17 ,18		CC45FSL1H221J	CERAMIC	220PF	J		E1E2	
IC1		AN6556	IC(8P AMP X2)					
IC1		M5218P	IC(8P AMP X2)					

E: Scandinavia &amp; Europe H: Audio Club K: USA P: Canada W: Europe

A: Saudi Arabia T: England U: PX(Far East, Hawaii)

UE: AAFES(Europe) X: Australia M: Other Areas

M2,E2,A2 : Silver Panel

▲ indicates safety critical components

## SPECIFICATIONS

## Audio Section

## Power Output

30 watts\* per channel minimum RMS, both channels driven, at 8 ohms from 40 Hz to 20,000 Hz with no more than 0.9% total harmonic distortion.

Maximum Continuous (IEC) . . . . . 30 W + 30 W 60 Hz to 12,500 Hz at 0.7% T.H.D. 8 ohms (U.K. and Europe model)

Both Channels Driven . . . . . 30 W + 30 W 8 ohms at 1,000 Hz (Except USA, U.K. and Europe)

Music Power . . . . . 70 W + 70 W 8 ohms (Except USA, U.K., Canada and Europe)

## Total Harmonic Distortion

## AUX input to Speaker output

(40 Hz to 20,000 Hz) . . . . . 0.9% at rated power into 8 ohms  
(40 Hz to 20,000 Hz) . . . . . 0.2% at rated power into 8 ohms  
(1,000 Hz) . . . . . 0.07% at 1/2 rated power into 8 ohms

## Phono input to Speaker

Output (1,000 Hz) . . . . . 0.07% at rated power with Volume -20 dB

## Intermodulation Distortion

(60 Hz : 7,000 Hz = 4 : 1) . . . . . 0.2% at rated power into 8 ohms

Damping Factor . . . . . 40 (1,000 Hz into 8 ohms)

Power Bandwidth . . . . . 10 Hz to 70,000 Hz at 1% T.H.D. 8 ohms

Frequency Response . . . . . 20 Hz to 100,000 Hz +1 dB, -3 dB

## Signal-to-Noise Ratio (IHF, A)

Phono MM . . . . . 73 dB for 2.5 mV input  
79 dB for 5.0 mV input

Tuner, Tape, AUX . . . . . 97 dB

## Signal-to-Noise Ratio (DIN)

Phono MM . . . . . 55 dB/50 mW (U.K. and Europe models)

Tuner, Tape, AUX . . . . . 55 dB/50 mW (U.K. and Europe models)

Phono Maximum Input Level . . . . . 140 mV (RMS), T.H.D. 0.9% at 1,000 Hz

## Output Level/Impedance

Tape REC (Pin) . . . . . 150 mV/330 ohms

Adaptor Out . . . . . 150 mV/330 ohms

Phono Frequency Response . . . . . RIAA standard curve ±0.5 dB (30 Hz to 20,000 Hz)

## Tone Control

Bass . . . . . ±9 dB at 100 Hz

Treble . . . . . ±9 dB at 10,000 Hz

Loudness Control . . . . . +9 dB at 100 Hz (at -30 dB Volume Level)

## Channel Separation (DIN)

Phono . . . . . 60 dB 2,200 ohms at 1,000 Hz  
AUX . . . . . 55 dB 47,000 ohms +250 pF at 1,000 Hz

## General

power Requirements . . . . . 120 V, 60 Hz (USA and Canada models), 220 V, 50 Hz (Europe model), 240 V, 50 Hz (U.K. and Australia models) or 110-120 V/220-240 V 50/60 Hz, switchable (Other countries)

Power Consumption . . . . . 1.5 A (USA and Canada models)  
100 W (Other countries)

AC Outlet . . . . . Unswitched 1 (200 W) (Except U.K., Australia and Europe)

Dimensions . . . . . W 420 mm (16-1/2")  
H 89 mm (3-1/2")  
D 242 mm (9-1/2")

## Weight

Net . . . . . 4.0 kg (8.8 lb)

Gross . . . . . 4.6 kg (10.3 lb)

\* Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in USA.

Note : We follow a policy of continuous advancements in developments. For this reason specifications may be changed without notice.

## KENWOOD CORPORATION

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## KENWOOD ELECTRONICS AUSTRALIA PTY. LTD.

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## KENWOOD &amp; LEE ELECTRONICS, LTD.

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